

**A WIRELESS TELEPHONE SYSTEM WITH BOTH CORDLESS SHORT
RANGE COMMUNICATION AND LONG RANGE MOBILE
WIRELESS CELLULAR TELEPHONE COMMUNICATION**

Abstract

5 Cordless and wireless telephone communication
functions are combined in a unitary wireless telephone
system that comprises a mobile wireless telephone member
combining short range radio frequency communication
implementation for transmitting and receiving voice data
10 over a short range, with long range radio frequency
communication implementation for transmitting and
receiving voice data over a long range. The system also
includes stationary communication means for receiving and
transmitting voice data from and to the mobile wireless
15 member voice data over said short range and stationary
communication means for respectively receiving and
transmitting voice data from and to the mobile wireless
member voice data over said long range.

The system may also include an implementation for
20 determining whether said mobile wireless telephone member
is outside said short range when said member is receiving
or transmitting said voice data, together with an
implementation for communicating with said mobile
wireless telephone member through said stationary short
25 range radio frequency whenever said member is determined
not to be outside of the short range and an
implementation for communicating with said mobile
wireless telephone member through the stationary long
range radio frequency implementation whenever said member
30 is determined to be outside of said short range.